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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,048	12/03/2004	Shmuel Shoshan	1268-239	2850

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EXAMINER

HAMIDINIA, SHAWN A

ART UNIT	PAPER NUMBER
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1653

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/517,048	Applicant(s) SHOSHAN, SHMUEL	
	Examiner Shawn Hamidinia	Art Unit 1653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The current application filed on December 3, 2004 is a 371 of PCT/IL02/00430 filed on June 3, 2002.

Information Disclosure Statement

2. The information disclosure statement filed on December 3, 2004 has been considered. Please see the attached initialed PTO-1449.

Specification/Claim Objections

3. Claim 3 and claim 4 are objected to due to minor grammatical errors. Claim 3, recites "said a multi-layer wound healing" and claim 4 recites "andlyophilizing". Appropriate corrections are required.

4. Objection to specification: NO brief description of drawings.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yoshisato et al. (1989).

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Yoshisato et al. teach a medical material, having a multilayer collagen structure for purposes of wound healing, see figure 1; page 14-15, lines 35-10. Yoshisato et al. further teach that the layer which contacts the wound is in the form of a film or spongy matrix to encourage healing, see page 12, lines 18-20; claim 16 and 18. This clearly anticipates claim 2 because the phrase "comprising at least one sponge collagen matrix" is previously described by Yoshisato et al. Also, Yoshisato et al. teach the second layer, a support layer, which is crosslinked and membranous, see claim 8; page 6, lines 20-22.

Yoshisato et al. disclose a method for the production of the multilayer collagen structure by crosslinking the fibrous collagen membrane having a crosslinking structure, and then performing lyophilization, forming a laminate of the support layer and a wound layer, see page 6 lines 21-28. The crosslinking technique they describe may comply with a conventional process, such as by heating or treating with an aldehyde crosslinking agent, see page 9, lines 10-28. Yoshisato et al. went on to disclose that there is no particular restriction on the crosslinking agent.

Yoshisato et al. describe that the function of this medical material is to cover wounds which can ultimately be used for treating dermal tissues injured by burning see page 3, lines 26-31; claim 16.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshisato et al. in view of Bunn et al. and further in view of Ohan et al. (US 2003/0003157 A1).

The teachings of Yoshisato et al. are outlined above.

Bunn et al. discuss that nonenzymatic glycosylation may be employed to generate crosslinks in collagen, see 1st paragraph, page 222; 2nd paragraph, page 223.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the crosslinking procedure of Bunn et al. for the production of a multi-layer collagen article taught by Yoshisato et al. The motivation to do so is described by Ohan et al. (US 2003/0003157 A1) because crosslinking collagen is a technique in common use and there are other crosslinking methods, such as ultraviolet irradiation and DHT, which have been shown to impart partial denaturation to the collagen molecule, thereby increasing its susceptibility to enzymatic degradation, see last paragraph, page 1.

Conclusion

9. No claims are allowed.

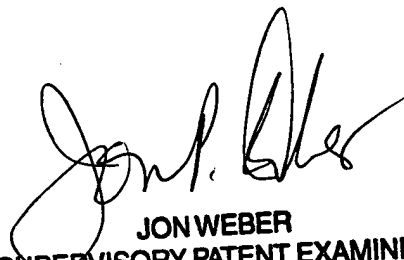
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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawn Hamidinia whose telephone number is (571) 272-4534. The examiner can normally be reached on Mon-Fri from 9:00 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached on (571) 272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAH



JON WEBER
SUPERVISORY PATENT EXAMINER